BTEC International Level 3 Diploma (720 GLH) in Building Services Engineering: Sample Delivery Plan

Audience

This document is aimed at supporting tutors and those delivering BTEC International Level 3 qualifications from April 2020.

Introduction

Clear unit planning and understanding of key deadlines are essential for a successful delivery programme. We have produced a sample delivery plan showing how the BTEC Diploma in Building Services Engineering could be delivered over one year, highlighting assessment milestones and indicating where you can teach units holistically.

Key sections

The document focuses on key dates to plan around and an example of how the Diploma can be structured, set out in the three sections below.

Section 1: Guide to key dates

Setting out the key activities and requirements for course delivery alongside dates and links to further information.

Section 2: Sample one-year plan – delivery chart

A chart setting out the key deliverables against chosen units.

Section 3: Sample one-year plan – detailed rationale

An in-depth rationale and explanation as to how the suggested plan was structured.

Further support can be found within the relevant specification on Pearson's website https://qualifications.pearson.com/en/qualifications/btec-international-level-3/construction.html#tab-Diploma

Below is an overview of how wider support also links to this document.

Support	Purpose
Delivery Guides	A companion to your BTEC International Level 3 specification and Authorised Assignment Briefs (AABs) and Sample Pearson Set Assignments. It contains ideas for teaching and learning, including practical activities, realistic scenarios, ways of involving employers in delivery, ways of managing independent learning and how to approach assessments. The aim of these guides is to show how the specification content might work in practice and to inspire you to start thinking about different ways to deliver your course.
Authorised Assignment Briefs	Provides scenarios and teaching plans for each unit, to be used either as they are set out, or to inform your own planning.
Schemes of Work	Demonstrates how the unit content can be covered in the GLH while providing lesson ideas and highlighting links to other units to help you plan your teaching.

Section 1: Guide to key dates

Setting out the key activities' order and requirements for course delivery alongside links to further information.

Action	Description	Resource/reference
Assessment plan(s)	An assessment plan(s) must be in place to demonstrate that sufficient time is available to deliver and assess all the required units in a timely manner. More than one plan may be required if there are different groups working at different speeds.	Assessment plans are available on the Pearson website. Please note that all units are internally assessed. For a small proportion of units Pearson sets the assignment and these are also internally assessed. Pearson Set Assignments will be available from October of the year of assessment and can be taken at any point in that year.
Assignment briefs	Assignment briefs should be internally verified to ensure they are fit for purpose and that the equipment, resources and staff expertise will be available. This is not required for Pearson Set Assignment units.	Authorised Assignment Briefs are available here
Learner induction	A short period of induction is strongly recommended to ensure learners are familiar with the programme and its requirements. Plagiarism, referencing, time management skills, the importance of meeting deadlines and centre policies should be covered.	
Register your learners	Learner registrations need to be made by the deadlines on our website. This will trigger the allocation of a Standards Verifier and support for your centre.	Edexcel Online
Allocation of Standards Verifier	The Standards Verifier needs to see the assessment plan(s) and will agree a sampling schedule with the centre. They are available to provide support and guidance.	The details of the Standards Verifier will be emailed to the Quality Nominee at the centre. Please ensure the Quality Nominee details registered with Pearson are accurate.
Internally assessed unit completed	The internally assessed unit(s) needs to have been sampled and reported prior to the end of teaching for the year.	A guide to internal assessments is available here.
Second sampling completed	Second sampling of internally assessed units that were not released for certification, as well as for NYFS outcomes, must be complete by the end of the teaching for the year.	

Section 2: Sample one-year plan – delivery chart

This plan is intended to be used as guidance.

Key

SA = Summative Assessment; LA = Learning Aim; INT = Internal assessment; SET = Pearson Set Assignment

				TERM 1												
Unit	**Unit title**	**Guided learning hours**	**Assessment method**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
1	Construction Technology	60 GLH	SET													
		3 hours per week (weeks 1–20)														
2	Construction Design	60 GLH	SET													
		2 hours per week (weeks 10–34) weeks 35–36 will be a total of 11 hours														
3	Construction Science	60 GLH	SET													
		2 hours per week (weeks 1–30)														
6	Construction Mathematics	60 GLH	INT													SA (LA A & B)
		3 hours per week (weeks 1–22)														
7	Graphical Detailing	60 GLH	INT										SA (LA A & B)			
		4 hours per week (weeks 1–15)														
12	Building Surveying in Construction	60 GLH	INT				SA (LA A)								SA (LA B & C)	
		5 hours per week (weeks 1–12)														
14	Low Temperature Hot Water Systems in Building Services Engineering	60 GLH	INT													

		5 hours per week (weeks 12–24)																

				TERM 2													
Unit	**Unit title**	**Guided learning hours**	**Assessment method**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**
1	Construction Technology	60 GLH	SET						SET	SET						
		3 hours per week (weeks 1–20)																
2	Construction Design	60 GLH	SET															
		2 hours per week (weeks 10–34) weeks 35–36 will be a total of 11 hours																
3	Construction Science	60 GLH	SET															
		2 hours per week (weeks 1–30)																
6	Construction Mathematics	60 GLH	INT									SA (LA C & D)						
		3 hours per week (weeks 1–22)																
7	Graphical Detailing	60 GLH	INT		SA (LA C)													
		4 hours per week (weeks 1–15)																
4	Safe Working Practices	60 GLH	INT															
		4 hours per week (weeks 14–28)																
14	Low Temperature Hot Water Systems in Building Services Engineering	60 GLH	INT			SA (LA A)								SA (LA B & C)				
		5 hours per week (weeks 12–24)																

16	Provision of Primary Services in Construction	60 GLH	INT				SA (LA A)				SA (LA B)					SA (LA C)
		5 hours per week (weeks 15–26)														
21	Building Services Science	60 GLH	INT										SA (LA A)			
		4 hours per week (weeks 20–34)														

				TERM 3												
Unit	**Unit title**	**Guided learning hours**	**Assessment method**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**
2	Construction Design	60 GLH	SET									SET	SET			
		2 hours per week (weeks 10–34) weeks 35–36 will be a total of 11 hours														
3	Construction Science	60 GLH	SET			SET										
		2 hours per week (weeks 1–29) week 29 is 4 hours														
4	Safe Working Practices	60 GLH	INT	SET	SET											
		4 hours per week (weeks 14–28)														
21	Building Services Science	60 GLH	INT				SA (LA B)				SA (LA C)					
		4 hours per week (weeks 20–34)														
27	Plumbing and Fluid Behaviour in Building Services Engineering	60 GLH	INT							SA (LA A)						SA (LA B & C)
		6 hours per week (weeks 30–39)														

28	Electrical Principles and Installation Standards in Building Services	60 GLH	INT						SA (LA A)							SA (LA B & C)
		6 hours per week (weeks 30–39)														

Section 3: Sample one-year plan – detailed rationale

Overview

The Level 3 Diploma in Building Services Engineering suggests 720 guided learning hours (GLH) and comprises six mandatory units, and six optional units. Four of the mandatory units are assessed using a Pearson Set Assignment. The other two mandatory units as well as optional units are all internally assessed via centre designed assignments or the Authorised Assignment Briefs.

The qualification structure identifies the mandatory and optional units and this information is also listed in the qualification specification. To achieve any qualification grade, learners must complete and have an outcome (D, M, P or U) for all units within a valid combination for the size of the award. For the Diploma in Building Services Engineering, learners must pass all mandatory units along with 720 GLH from the optional units. This means that learners could attain a U grade for a maximum of three optional units and still achieve a Pass grade overall depending on their other results.

The sample delivery plan is based on the qualification being delivered over one year.

If your centre is subject to Standards Verification, your Standards Verifier will confirm sampling arrangements with you.

Involving employers in the assessment/delivery

There is no compulsory requirement for a work experience placement within the qualification. All units lend themselves to a range of industry employer involvement, for example, in the form of a site visit, guest speaker or case study.

Which units are assessed by Pearson Set Assignments?

Units 1, 2, 3 and 4 will be assessed by Pearson Set Assignment. The assignments will be available from September each year and are valid for one year only. The assignment can be taken at any time in the year. The evidence can be resubmitted once.

Where a learner has not achieved the level of performance required to pass the relevant learning aims after resubmission of an assignment, they may be offered a single retake opportunity using a new assignment.

Internal mandatory units

There are two internal mandatory units (*Unit 6: Construction Mathematics* and *Unit 12: Building Surveying in Construction*) for the Extended Diploma.

In addition to all of the mandatory units, six optional units have been chosen for this delivery plan. This is an example only and the centres could choose different optional units depending upon the local needs.

Suggestions for which units to teach

The plan shows **six mandatory units (1, 2, 3, 4, 6 and 12),** that provide a good base for further study. Units 1, 2, 3 and 4 will be assessed using a Pearson Set Assignment, while Units 6 and 12 will be internally assessed.

Units 1 and 3 should be the first mandatory units to be taught followed by Unit 2 as learners are likely to take longer to develop knowledge and skills in Unit 3 than in Unit 1, the assessment of Unit 1 should be earlier than the assessment of Unit 3.

Unit 3 will take 30 weeks to complete delivery and assessment which will give learners enough time to familiarise themselves with the content and hence their performance in assessments is likely to improve.

The mandatory Unit 2 will start later in the year as it draws upon the learning across other units, such as Units 1 and 7. Starting the unit late and planning contact hours so that the final assessment is like a synoptic assessment, will support learners to attempt the Pearson Set Assignment holistically.

Unit 6 develops skills to apply mathematical techniques to construction-related situations and contexts. The delivery could partially be supported/contextualised via Units 3 and 10.

Unit 12 has been chosen and will start in the first week. It will provide a strong base to develop skills in practical building surveying tasks. This is an important skill which would help any building services engineering job role as well as for further study. As this unit is based around fieldwork, starting the delivery from the first week will generate interest among the learners.

Mandatory unit 4 is assessed via a Pearson Set Assignment and is planned for delivery starting from term 2. This unit has been included in term 2 as, by then, learners would have learned about site practices as well as undertaken a number of assessments. The learners should be ready to contribute constructively during the delivery as well as approach the Pearson Set Assignment in a holistic manner.

The **six optional units** selected should meet the needs and interests of the learners while providing a progression route to their chosen pathway.

Unit 7 will develop learners' ability to produce graphical information including drawings, sections and sketches. These skills are essential, not only across the whole qualification, but later on while working in the industry. These skills underpin assessment of Units 1 and 2.

Units 14 and 16 are specialist units which will support learners in developing a sound footing for other specialist units such as Unit 27, as is the case with Unit 21 which specifically addresses scientific principles related to building services engineering.

Units 27 and 28 provide learners with knowledge of specialist areas within building services engineering. This is not only helpful to gain employment but also to identify interest in a specific area which learners could pursue.

Please note that no assessment submissions have been planned during the weeks when the Pearson Set Assignments are administered.

It is important that the teaching and learning covers content of all the units and that learners are fully prepared for the assessments.

Centres are encouraged to timetable a period of induction for learners at the start of the programme. This should include information on topics such as the structure of the units, how to use an assignment brief, importance of command words, how to work to meet deadlines, consequences of not meeting deadlines, how to reference work, and the importance of evidence submitted for assessment being independently produced, valid and authentic. Centre policies on malpractice and plagiarism should be explained.